



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,984	11/05/2001	Michael Baentsch	CH920000018US1	7655

25259 7590 11/04/2005

IBM CORPORATION
3039 CORNWALLIS RD.
DEPT. T81 / B503, PO BOX 12195
REASEARCH TRIANGLE PARK, NC 27709

EXAMINER

SON, LINH L D

ART UNIT PAPER NUMBER

2135

DATE MAILED: 11/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/992,984	Applicant(s) BAENTSCH ET AL	
	Examiner Linh LD Son	Art Unit 2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is responding to the amendment dated 07/21/05.
2. Claims 1-19 are pending.

Claim Objection

3. Claims 1, 10, and 12 recites the term "CAP file". The acronym "CAP" needs to be spelled out as to what it stands for. Examiner assumes that it is the converted Applet.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 7 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by BALASSANIAN, US Patent No. 6324685.

As per claims 7 and 17:

BALASSANIAN discloses "A method for language verification of a reduced file derived from an original file, the reduced file conserving original semantics, said method comprising:

- a) a conversion step for converting said reduced file (intermediate code) into a corresponding converted file (optimized code) that is semantically identical to said reduced file" in (Col 3 lines 9-28, Col 5 lines 1-25, Col 5 line 65 to Col 6 line 6); and
- "b) a language-verification step for verifying said converted file" in (Col 5 lines 25-53).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 10, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over BALASSANIAN, US Patent No. 6324685.

8. As per claims 1, 10, 12:

BALASSANIAN discloses "A method for language verification of a Java card CAP file created from an original Java code file, comprising: a) a conversion step for converting said Java card CAP file into a corresponding converted Java code file that is

Art Unit: 2135

semantically identical to said Java card CAP file” in (Col 3 lines 9-28, Col 5 lines 1-25, Col 5 line 65 to Col 6 line 6); and b) “a language-verification step for verifying said converted Java code file for compliance with Java language specifications” in (Col 5 lines 25-53).

However, BALASSANIAN does not specifically disclose “JAVA card CAP file”.

Nevertheless, BALASSANIAN does disclose the program code is the Java Source applet code (Col 3 lines 29-24). Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to modify BALASSANIAN to implement the conversion process to convert the JAVA card converted applet file into another format (Col 5 lines 1-25).

9. Claims 2-3, 8-9, 11, 13-14, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over BALASSANIAN in view of SCHWABE et al, US Publication No. 2003/0028686A1, hereinafter “SCHWABE”.

10. As per claims 2, 8, 11, 13, and 18:

BALASSANIAN discloses “ A method for language verification of a Java card CAP file according to Claims 1, 7, 10, 12, and 17”. However, BALASSANIAN does not specifically teach “wherein said conversion step further comprises: a pre-conversion substep for converting Java card IDs contained in said Java card CAP file into symbolic names, and for converting said Java card CAP file into a standard Java format, to obtain a pre-converted file; and a mapping substep for replacing in said pre-converted file

externally defined names with original names by using a mapping scheme between Java names and tokenized identifiers, to obtain the converted Java code file for said language-verification step” Nevertheless, SCHWABE does teach the steps above in (Para 0043-45 and Para 0050-51). Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to modify BALASSANIAN's invention to incorporate SCHWABE's conversion steps to reconvert the JAVA card CAP file into standard JAVA format.

11. As per claims 3, 14, and 19:

BALASSANIAN and SCHWABE disclose “A method for language verification of a Java card CAP file according to Claims 2, 13, and 18, wherein said mapping sub-step is performed using a referenced Java export file which is available as a result of creating said Java card CAP file from said original Java code file” in (Para 0043-45 and 0049).

12. As per claim 9:

BALASSANIAN and SCHWABE disclose “A method for language verification of a reduced file according to Claim 8, wherein said mapping sub-step is performed using a referenced difference file which is available as a result of deriving said reduced file from said original file” in (Para 0043-45, and 0056)

13. Claims 4-6, and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over BALASSANIAN in view of Levy et al, US Publication No. 2004/0068726A1, hereinafter "Levy".

14. As per claims 4, and 15:

BALASSANIAN discloses "A method for language verification of a Java card CAP file according to Claims 1 and 12". However, BALASSANIAN is silent on "the method further comprising: c) a signature step for creating, after verification of said converted Java code file in said language verification step, a second cryptographic signature file". Nevertheless, Levy discloses the "Virtual Machine with securely distributed bytecode verification" invention, which include a method of creating the signature for verification in (Para 0025). Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to incorporate the method of Levy in to BALASSANIAN invention for use to authenticate the CAP file for authenticity.

15. As per claims 5 and 16:

BALASSANIAN discloses "A method for language verification of a Java card CAP file according to Claims 4 and 15". However, BALASSANIAN is silent on "a method, further comprising: d) a loading step for loading the second cryptographic device together with the Java card CAP file, signature file to a storage". Nevertheless,

Levy discloses the method in (Para 0029). Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to incorporate the method of Levy in to BALASSANIAN invention for use to authenticate the CAP file for authenticity.

16. As per claim 6:

BALASSANIAN discloses "A method for language verification of a Java card CAP file according to Claim 4". However, BALASSANIAN is silent on "a method, wherein the second cryptographic signature file is cryptographically verifiable, said method further comprising: e) an executing step for executing cryptographic verification said Java card CAP file upon a positive". Nevertheless, Levy discloses the method in (Para 0029). Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to incorporate the method of Levy in to BALASSANIAN invention for use to authenticate the CAP file for authenticity.

Response to Arguments

17. Applicant's arguments, see Amendment, filed 7/21/2005, with respect to the rejection(s) of claim(s) 1-3, 7-14, and 17-19 under 35 U.S.C. 103(a) and Claims 4-6, and 15-16 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of BALASSANIAN.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh LD Son whose telephone number is 571-272-3856. The examiner can normally be reached on 9-6 (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Linh LD Son

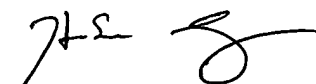
Application/Control Number: 09/992,984

Art Unit: 2135

Examiner

Art Unit 2135

Page 9

A handwritten signature in black ink, appearing to be 'J. L. S.' with a stylized flourish at the end.

Primary Examiner

Art Unit 2135